Request to Archive
With The National Centers for Environmental Information
For HIRS Ch12 Brightness Temperature v2.6 CDR
Provided by National Climatic Data Center

2013-06-28

This information will be used by NCEI to conduct an appraisal and make a decision on the request.

1. Who is the primary point of contact for this request?

Lei Shi
NCDC
828-350-2005
lei.shi@noaa.gov

2. Name the organization or group responsible for creating the dataset.

NCDC RSAD PB

3. Provide an overview summarizing the scope of data you want to archive. Describe the outputs, data variables, including their measurement resolution and coverage.

Intersatellite calibration is carried out for the clear-sky HIRS channel 12 measurement. As the intersatellite biases are scene brightness temperature dependent, an algorithm is developed to account for the varying biases with respect to brightness temperature. The HIRS measurements from the NOAA series and Metop series of polar orbiting satellites are calibrated to a baseline satellite. The time series with a global coverage of the intersatellite calibrated HIRS clear-sky channel 12 brightness temperature data in pixel resolution from 1979 to present is constructed.
In addition to the clear-sky channel 12 brightness temperature (pixel resolution) CDR data, the following datasets produced during the CDR data processing are also to be archived:
1. HIRS all-sky data
2. HIRS clear-sky data
3. Limb-corrected clear-sky data
4. Monthly gridded clear-sky channel 12 brightness temperature.

4. What is the time period covered by the dataset? (YYYY-MM-DD, YYYY-MM or YYYY)

From 1979 to 2012

5. Edition or version number(s) of the dataset:

v02r05

6. Describe the level to which the data are processed. For example, are these unprocessed raw observations, derived parameters, quality controlled or inter-calibrated data, etc.?

The CDR dataset is HIRS clear-sky inter-calibrated brightness temperature data at pixel resolution.

7. Approximate date when the dataset was or will be released to the public:

2013-09-30

8. Who are the expected users of the archived data? How will the archived data be used?
climate research community

9. Has the dataset undergone user evaluation and/or an independent review process? Did NCEI participate in design reviews?
Data are compared with upper tropospheric water vapor measurements from other sensors and have been used in atmospheric circulation studies.

10. Describe the dataset's relationship to other archived datasets, such as earlier versions or related source data. If this is a new version, how does it improve upon the previous version(s)?
The Geostationary IR channel brightness temperature CDR uses the window channel (channel 8) from HIRS all-sky data to inter-calibrate Geostationary IR channel brightness temperatures.

11. List the input datasets and ancillary information used to produce the data.
HIRS level 1B.

12. List web pages and other links that provide information on the data.
NetCDF attributes contain metadata information.

13. List the kinds of documents, metadata and code that are available for archiving. For example, data format specifications, user guides, algorithm documentation, metadata compliant with a standard such as ISO 19115, source code, platform/instrument metadata, data/process flow diagrams, etc.
1. CATBD

Shi and Bates (2011), http://onlinelibrary.wiley.com/doi/10.1029/2010JD014847/abstract

14. Indicate the data file format(s).
1. netCDF-4

15. Are the data files compressed?
No

16. Provide details on how the files are named and how they are organized (e.g., file_name_pattern_YYYYMM.tar in monthly aggregations).
Data are in daily files, for example:
Clear-sky channel 12 brightness temperature
HIRS-CH12_SWATH_v02r05_N17_2012180.nc

Additional data:
All-sky data
HIRS.N17.Y12.D180.V22.AS

HIRS clear-sky data
HIRS.N17.Y12.D180.V22.CS

Limb-corrected clear-sky data
HIRS.N17.Y12.D180.LC

Monthly gridded clear-sky channel 12 brightness temperature data are in yearly files:
HIRS-CH12_MONGRD_v02r05_2012.nc

17. Explain how to access sample data files and/or a file listing for previewing. If it is not available now, when will it be available?

Sample files can be provided upon request.

18. What is the total data volume to be submitted?

Historic Data: all historic data or data submitted as a completed collection.

Total Data Volume:	2TB
Number of Data Files:	30000

19. Are later updates, revisions or replacement files anticipated? If so, explain the conditions for submitting these additional data to the archive.

The data will be extended to 2012. Additional (non-CDR) datasets to be added.

20. Describe the server that will connect to the ingest server at NCEI for submitting the data.

Physical Location:	Asheville, NC
System Name:	ftp
System Owner:	NCDC
Additional Information:	

21. What are the possible methods for submitting the data to NCEI? Select all that apply.

1. FTP PULL

22. Identify how you would like NCEI to distribute the data. Web access support depends on the resources available for the dataset.

1. Advanced web services (e.g., THREDDS Catalog Service)

23. Will there be any distribution, usage, or other restrictions that apply to the data in the archive?

No known constraints apply to the data.

24. Discuss the rationale for archiving the dataset and the anticipated benefits. Mention any risks associated with not archiving the dataset at NCEI.

The data are archived for the CDR program.

25. Are the data archived at another facility or are there plans to do so? Please explain.

No

26. Is there an existing agreement or requirement driving this request to archive? Have you already contacted someone at NCEI?

Requested by CDRP.

27. Do you have a data management plan for your data?

No

28. Have funds been allocated to archive the data at NCEI?

No

29. Identify the affiliated research project, its sponsor, and any project/grant ID as applicable.

30. Is there a desired deadline for NCEI to archive and provide access to the data?

Archive by: 2013-09-30

Accessible by:

31. Add any other pertinent information for this request.

None